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1/22 REGEN 100 OPTICAL AMPLIFIER REGEN

FIG. 1



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2/22

<u>200</u>

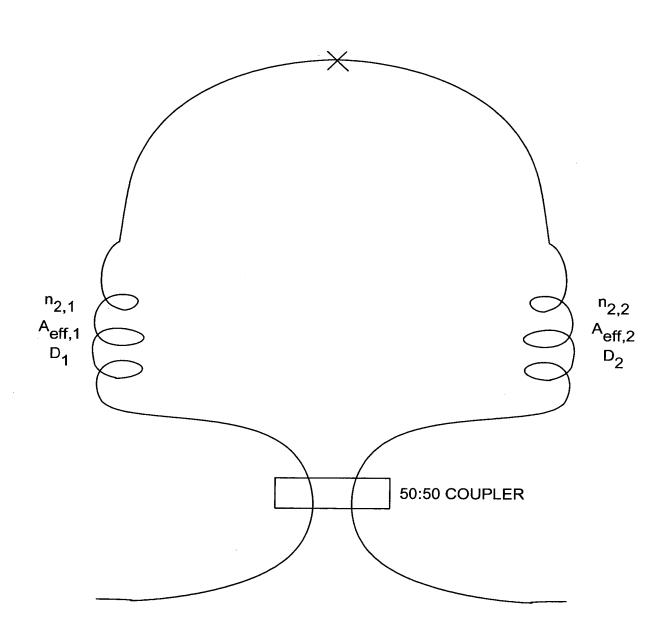
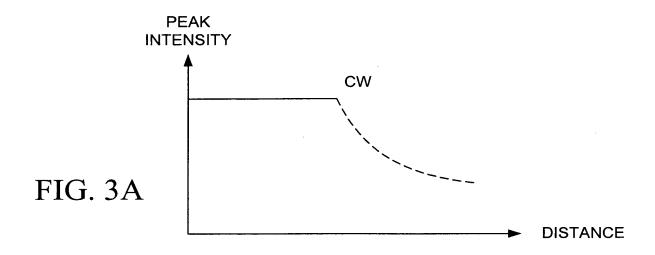
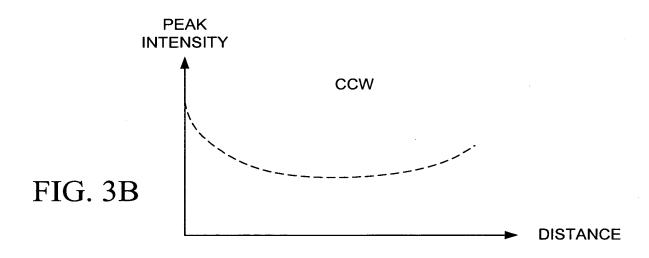
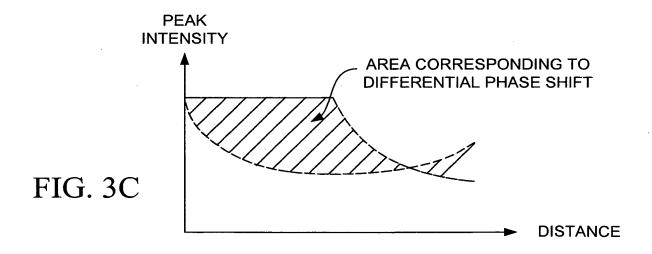


FIG. 2

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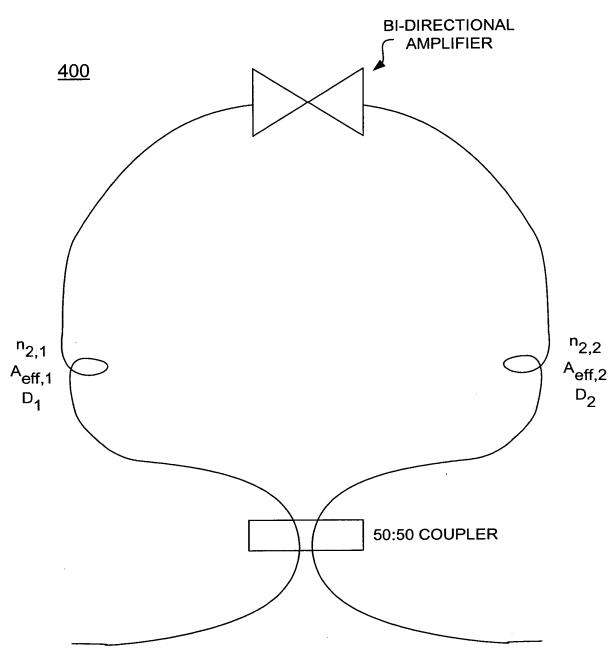
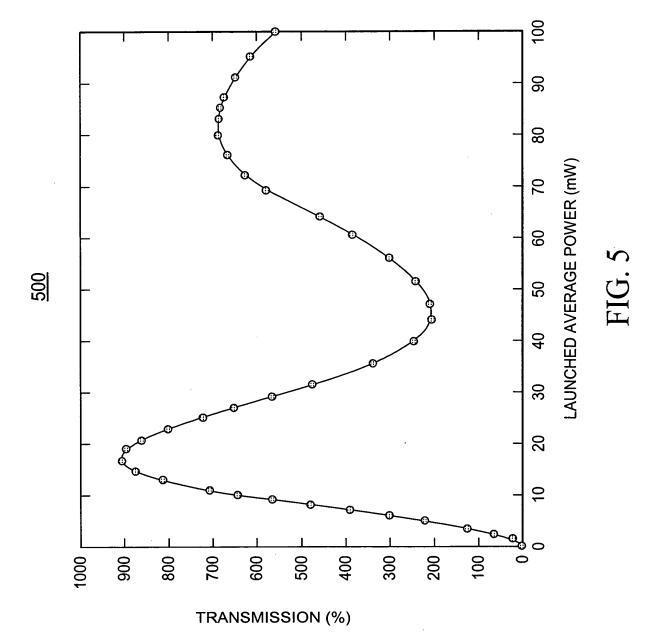


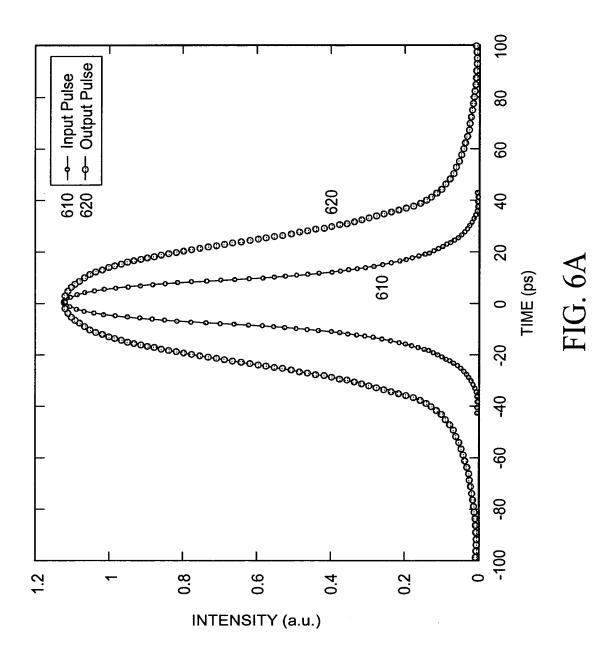
FIG. 4

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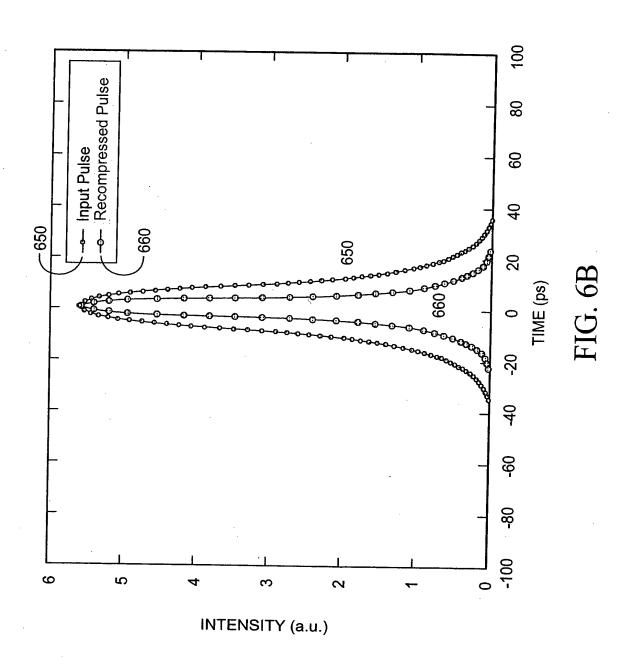




Appln. S/N 09/784,649 Atty's Dkt: 069204.0167 For: SNR Booster for WDM Systems By: Mohammed N. Islam File Date: February 14, 2001 - Page 6 of 22

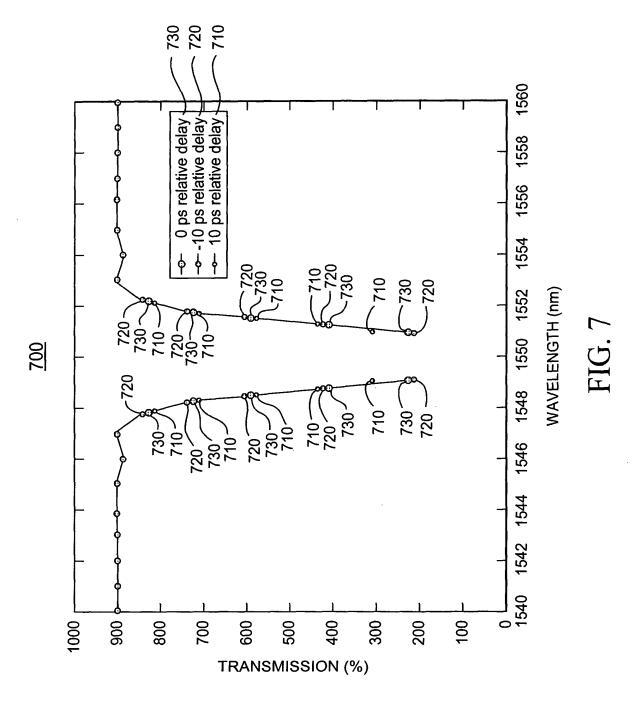


Appln. S/N 09/784,649 Atty's Dkt: 069204.0167 For: SNR Booster for WDM Systems By: Mohammed N. Islam File Date: February 14, 2001 - Page 7 of 22



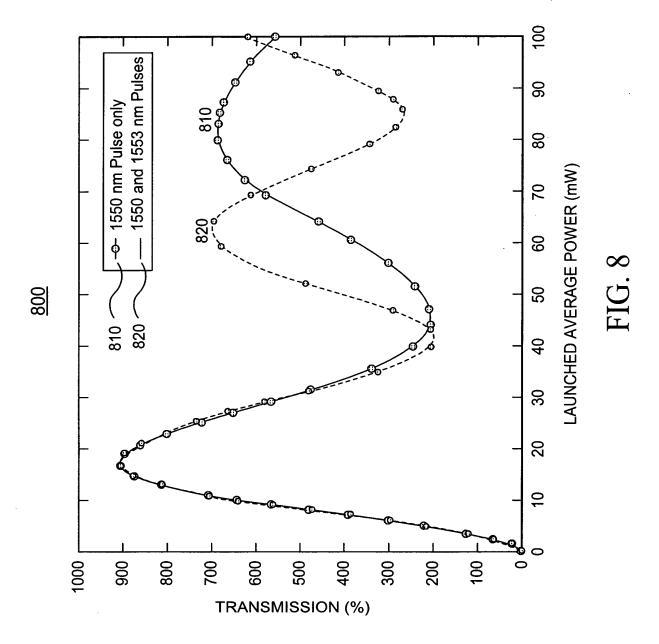


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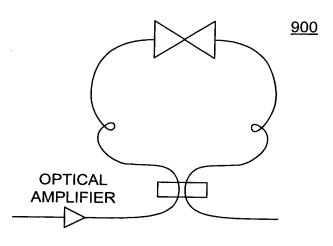
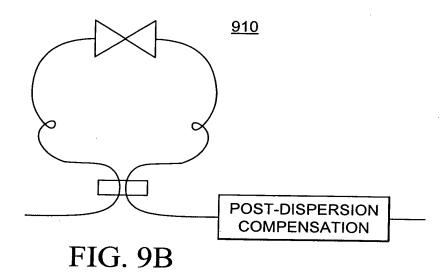
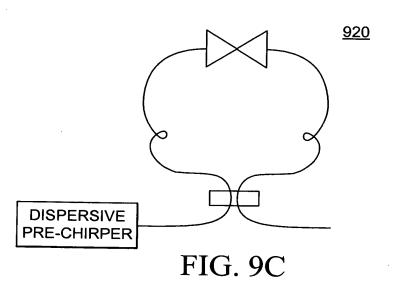


FIG. 9A







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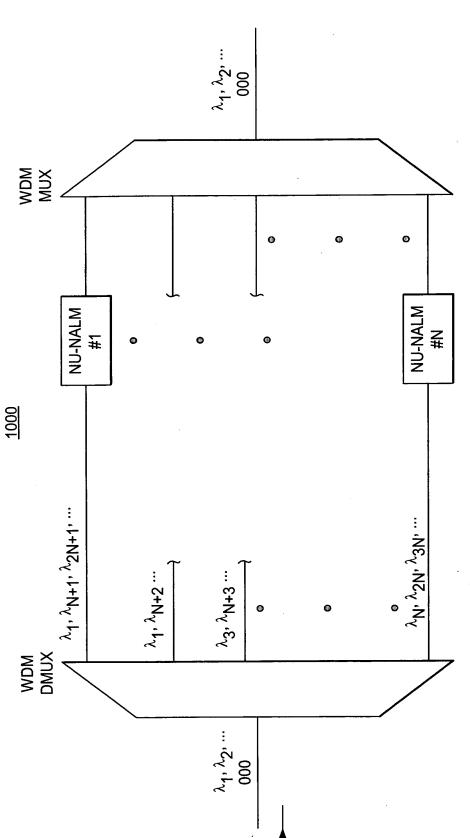
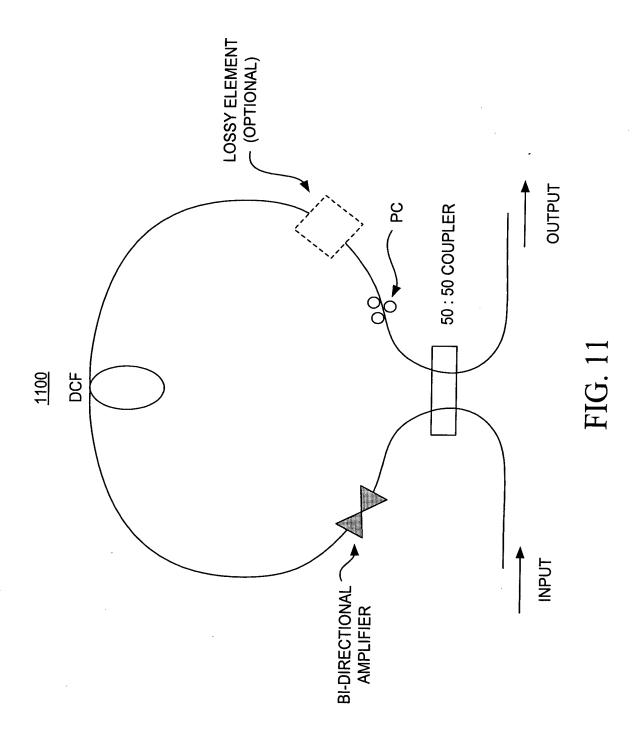


FIG. 10



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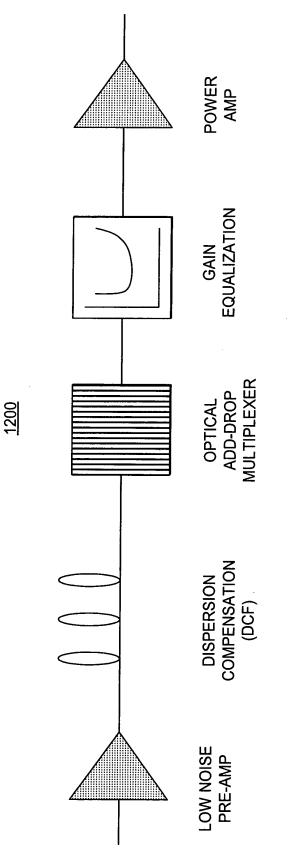
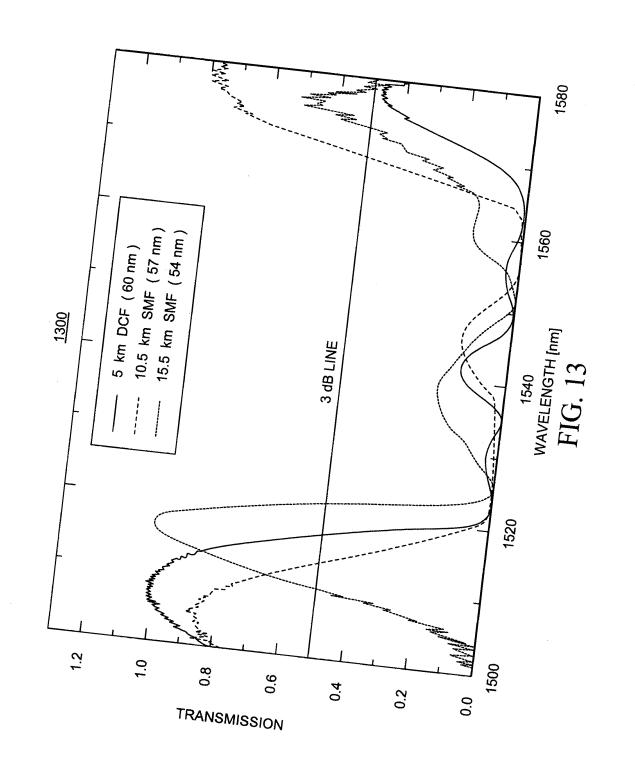


FIG. 12



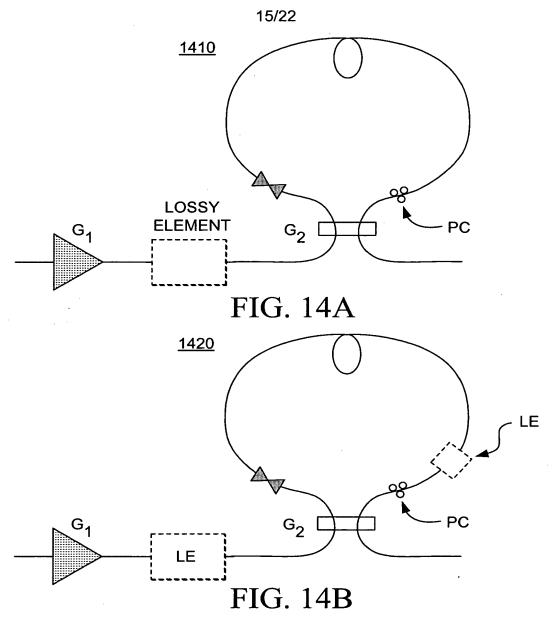
Appln. S/N 09/784,649 Atty's Dkt: 069204.0167 For: SNR Booster for WDM Systems By: Mohammed N. Islam File Date: February 14, 2001 - Page 14 of 22



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P _{in} (dBm)	G ₁ (dB)	G ₂ (dB)	P _{out} (dBm)
-11	0	30	9.18
-11	5	25	9.17
-11	10	20	9.16
-11	15	15	9.10

<u>1430</u>

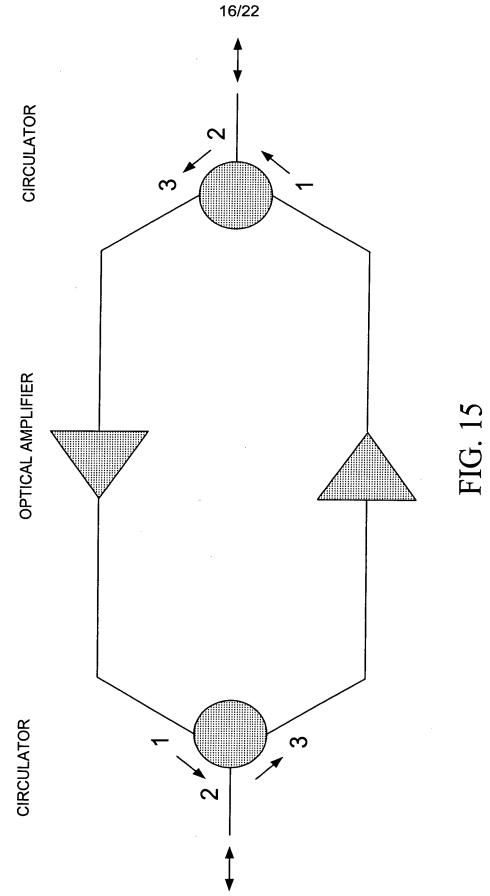
FIG. 14C



1500

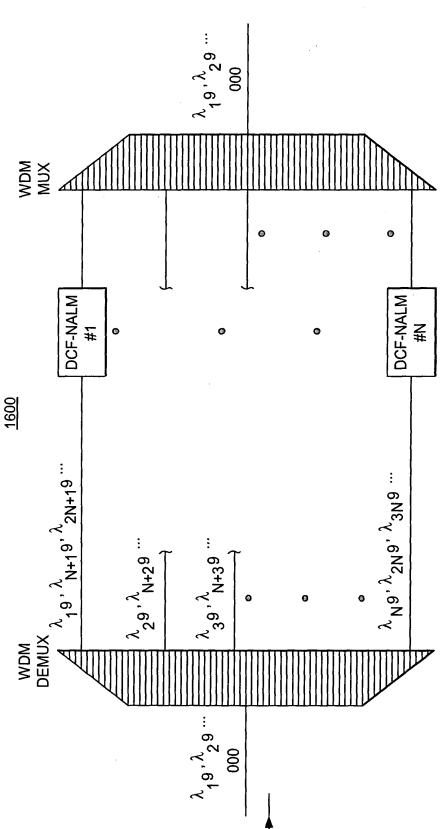
Appln. S/N 09/784,649 Atty's Dkt: 069204.0167 For: SNR Booster for WDM Systems By: Mohammed N. Islam File Date: February 14, 2001 - Page 16 of 22

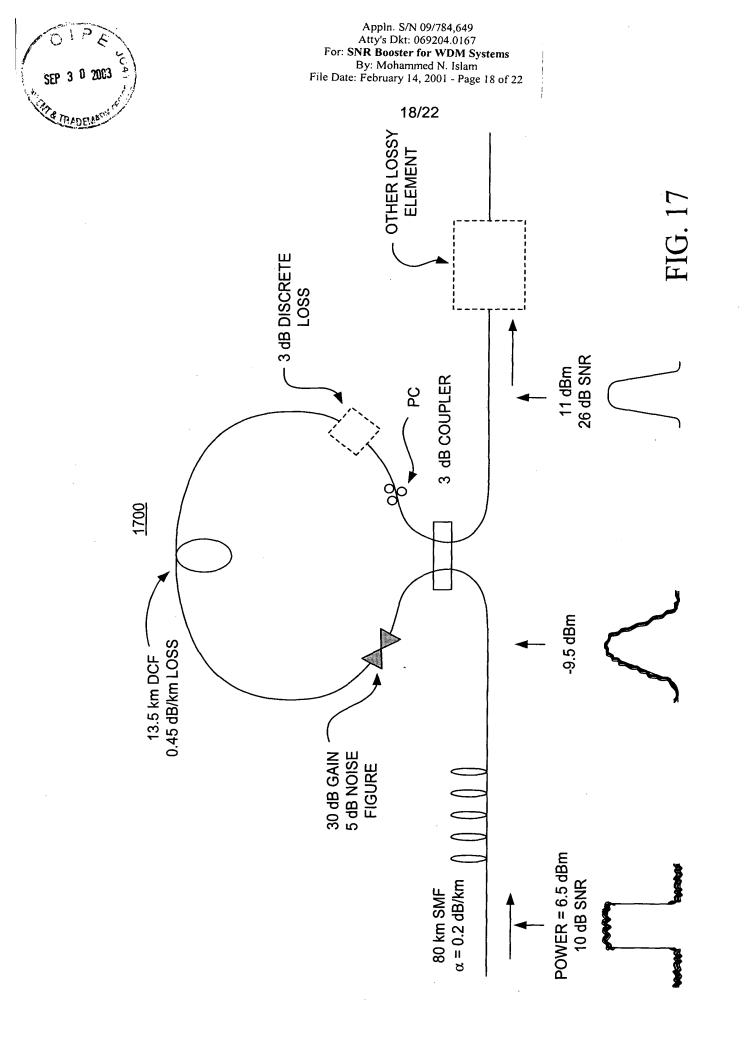
40100





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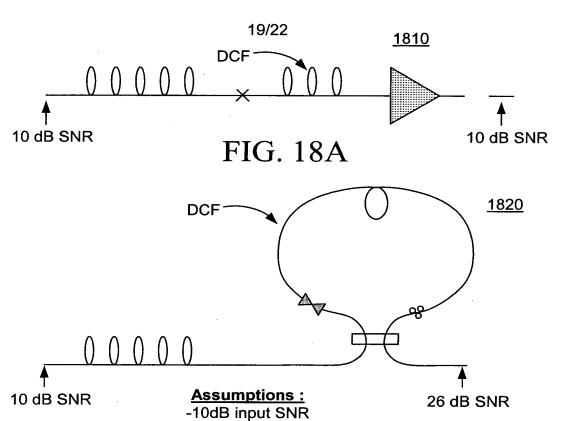


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Results:

16 dB improvement in SNR

FIG. 18B

(5 GHz bandwidth) -5 dB amplifier NF

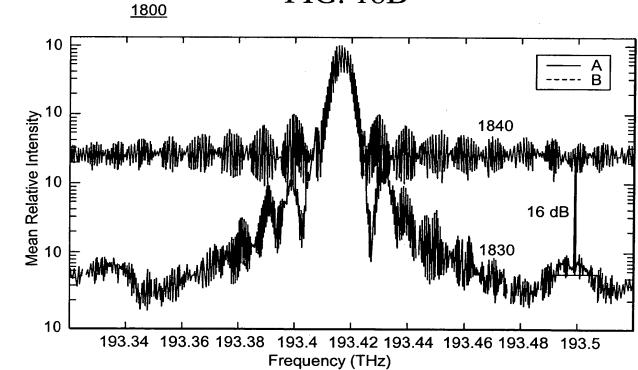
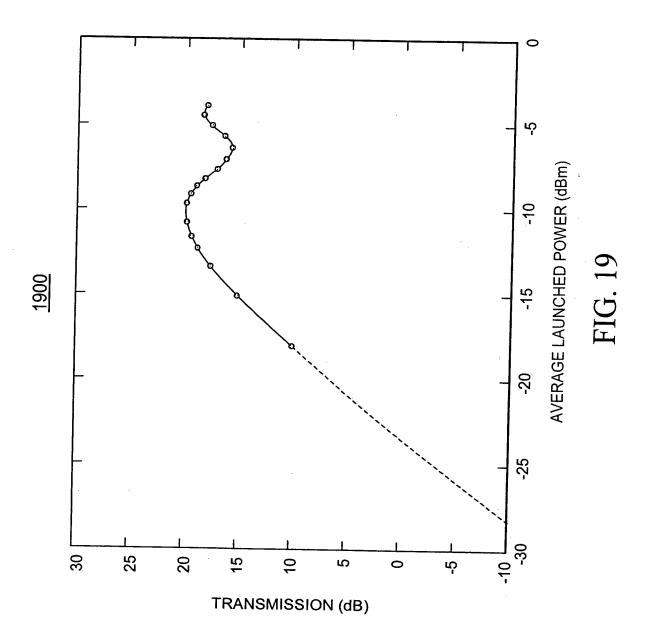


FIG. 18C



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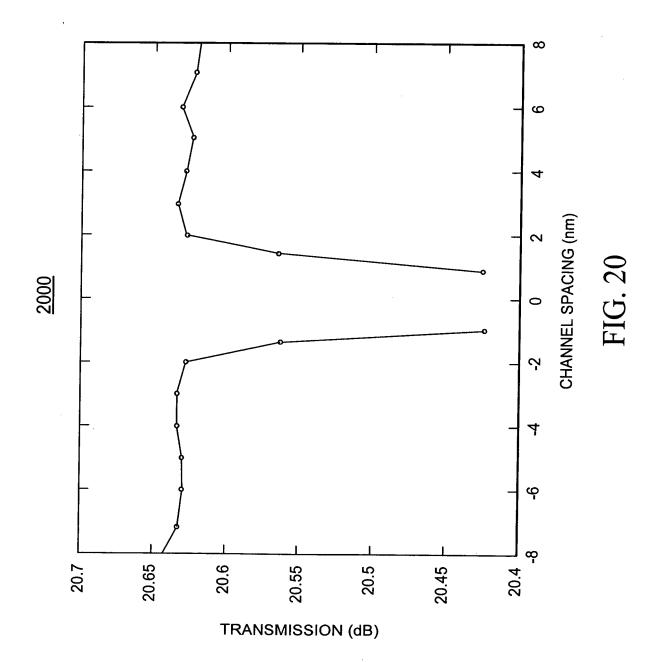




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